Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1(Currently Amended). A system, comprising: 1 a graph-decoder based speech recognition mechanism for recognizing a word 2 sequence, from input speech data, based on a language model using a graph decoder, 3 the graph-decoder based speech recognition mechanism having a recognition 4 acceptance mechanism to determine whether the graph decoder based speech 5 recognition mechanism fails; and 6 a keyword based speech recognition mechanism for recognizing, when, when 7 the graph-decoder based speech recognition mechanism fails, the word sequence, the 8 keyword based speech recognition mechanism including: 9 a keyword spotting mechanism to detect, using at least one acoustic 10 model, at least one keyword from the input speech data based on a keyword list; 11 and 12 a keyword based recognition mechanism to recognize the word sequence 13 using the at least one keyword, detected by the keyword spotting mechanism, 14 based on the language model. 15

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2(Currently Amended). The system according to claim 1, wherein the graph 1 decoder based speech recognition mechanism comprises: 2 a graph decoder for recognizing the word sequence from the input speech data 3 based on at least one acoustic feature to generate a recognition result, the recognizing 4 being performed according to the at least one acoustic model model and the language 5 model; and 6 the recognition acceptance mechanism for determining whether to accept the 7 recognition result generated by the graph decoder based speech recognition 8 mechanism or to activate, when the recognition result from the graph decoder based 9 recognition mechanism is not accepted, the keyword based speech recognition 10 mechanism. 11 1 3(Previously Presented). The system according to claim 1, further comprising an 1 acoustic feature extractor to extract the at least one acoustic feature from the input 2 speech data. 3 1 4(Currently Amended). The system according to claim 2, wherein the keyword 1 spotting mechanism is activated by the recognition acceptance mechanism, a keyword 2 based recognition mechanism for recognizing the word sequence using the at least one 3 keyword, detected by the keyword spetting mechanism, based on the language model. 4 if the recognition result from the graph decoder based recognition mechanism is not 5 accepted. 6

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| 1 | 5(Currently Amended). A method, comprising: |
|----|--|
| 2 | recognizing, by a graph decoder, a word sequence from input speech data based |
| 3 | on at least one acoustic features, the recognizing being performed using at least one |
| 4 | acoustic model and a language model; |
| 5 | determining, by a recognition acceptance mechanism, whether to accept the |
| 6 | word sequence or to activate a keyword spotting mechanism; |
| 7 | detecting, by the keyword spotting mechanism when activated, at least one |
| 8 | keyword, according to a keyword list, from the input speech data based on the at least |
| 9 | one acoustic model; and |
| 10 | recognizing, by a keyword based recognition mechanism, the word sequence |
| 11 | using the at least one keyword, detected by the detecting, based on the language |
| 12 | model. |
| 1 | |
| 1 | 6(Previously Presented). The method according to claim 5, further comprising: |
| 2 | receiving the input speech data; and |
| 3 | extracting, by an acoustic feature extractor, the at least one acoustic feature from |
| 4 | the input speech data. |
| 1 | |
| 1 | 7(Currently Amended). A computer-readable medium encoded with a program, |
| 2 | the program, when executed, causing: |
| 3 | recognizing, by a graph decoder, a word sequence from input speech data based |
| 4 | on at least one acoustic features, the recognizing being performed using at least one |
| 5 | acoustic model and a language model; |

| 6 | determining, by a recognition acceptance mechanism, whether to accept the |
|--------|--|
| 7 | word sequence or to activate a keyword spotting mechanism; |
| ' 8 | detecting, by the keyword spotting mechanism when activated, at least one |
| 9 | keyword, according to a keyword list, from the input speech data based on the at least |
| 10 | one acoustic model; and |
| 11 | recognizing, by a keyword based recognition mechanism, the word sequence |
| 12 | using the at least one keyword, detected by the detecting, based on the language |
| 13 | model. |
| 1 | |
| 1 | 8(Previously Presented). The medium according to claim 7, the program, when |
| 2 | executed, further causing: |
| 3 | receiving the input speech data; and |
| 4 | extracting, by an acoustic feature extractor, the at least one acoustic feature from |
| 5 | the input speech data. |